

**REMARKS**

Applicants have amended claims 1, 6, 9, 14, 19, 22, 27, 28, 36, 37, 40, 45, 47, 49, and 51. Applicants note with appreciation the Office's indication that claims 9-13, 22-26, 31-35, 40-44, 47, and 51 would be allowable if rewritten in independent form including all of the limitations of the base claim. In view of the above amendments and the following remarks, reconsideration of the outstanding office action is respectfully requested.

This Office has objected to claim 45 asserting that it recites that the structure focuses a portion of the light incident thereon onto a portion of the elliptical shaped mirror (lines 7-8). The Office asserts that the structure does not actually focus light onto the elliptical mirror, but merely directs it there (see fig. 3) and suggests replacing "focusing" with "directing" in line 7 of claim 45. Accordingly, Applicants have amended claim 45 in accordance with the Office's suggestion. In view of the foregoing amendment and remarks, the Office is respectfully requested to reconsider and withdraw the objection to claim 45.

The Office has rejected claims 1-8, 14-21, 27-30, and 36-39 are rejected under 35 U.S.C. 102(e) as being anticipated by US Patent Publication No. 2001/0009541 to Ueyanagi (Ueyanagi). The Office asserts that Ueyanagi discloses in Figs. 1 or 6: an optical element 6; at least one structure 8 at least partially in a non-opaque portion of the optical element and at least adjacent a surface of the optical element; and a source 2 of light with a mode profile that provides an electric field which has a vector component substantially perpendicular to the surface of the optical element, the source is positioned to propagate at least a portion of the light through the optical element onto an object 12, the structure 8 enhancing the electric field of the light which optically interacts with the object (See e.g. [0042], [0044], [0055], and [0059]-[0063]).

Ueyanagi does not disclose or suggest, "at least one structure at least partially in a non-opaque portion of the optical element and at least adjacent a surface of the optical element, wherein the structure has at least one pointed tip" as recited in claim 1, "providing an optical element with at least one structure at least partially in a non-opaque portion of the optical element and at least adjacent to a surface of the optical element, wherein the structure has at least one pointed tip" as recited in claim 14, "a structure at least partially in a non-opaque portion of the optical element and at least adjacent a surface the optical element, wherein the structure has at least one pointed tip" as recited in claim 27, or "depositing a

material in the at least one opening to form a structure, wherein the structure is formed to have at least one pointed tip” as recited in claim 36.

The Office’s attention is respectfully directed to FIGS. 1A-1D, 2D, 2E, 3A, 6, 8, 10A, 13A, 14B in Ueyanagi which clearly illustrates that the micro metal member 8 does not have a pointed tip. Nowhere does Ueyanagi teach or suggest a pointed tip for the micro metal member 8. However, as illustrated in FIGS. 3 and 4 in the above-identified patent application, the present invention clearly discloses the use of a structure with a pointed tip. As discussed in paragraphs 38 and 39 in the above-identified patent application, by shaping the structure to have a pointed tip a highly localized, enhanced field can be provided. This enhanced field which results from the pointed tip allows for a highly localized interaction with the surface 26 of the object 12. Accordingly, in view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw the rejection of claims 1, 14, 27, and 36. Since claims 2-8 depend from and contain the limitations of claim 1, claims 15-21 depend from and contain the limitations of claim 14, claims 28-30 depend from and contain the limitations of claim 27, and claims 37-39 depend from and contain the limitations of claim 36, they are distinguishable over the cited references and are patentable in the same manner as claims 1, 14, 27, and 36.

Ueyanagi does not disclose or suggest, “wherein the structure is elongated and extends in a direction which is substantially perpendicular to the surface of the optical element” as recited in claim 6, 19, 28, and 37. Again, the Office’s attention is respectfully directed to FIGS. 1A-1D, 2D, 2E, 3A, 6, 8, 10A, 13A, and 14B in Ueyanagi which clearly illustrates that the micro metal member 8 does not have an elongated shape which extends in a direction which is substantially perpendicular to the surface 6b. Nowhere does Ueyanagi teach or suggest such an orientation for micro metal member 8. However, as illustrated in FIGS. 3 and 4 in the above-identified patent application, the present invention clearly discloses the use of a structure is substantially perpendicular to the surface of the optical element. Again, with this orientation in the present invention a narrow portion of the structure is adjacent the object to provide a highly localized, enhanced field. This enhanced field which also results from this orientation of the structure allows for a highly localized interaction with the surface 26 of the object 12. Accordingly, in view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw the rejection of claims 6, 19, 28, and 37.

The Office also has rejected claims 45-46, 48-50, and 52 under 35 U.S.C. 102(a) as being anticipated by US Patent No. 6,036,324 to Bernacki et al. (Bernacki). The Office asserts that Bernacki discloses: an elliptical shaped mirror 14; at least one structure 20 positioned to optically interact with the elliptical shaped mirror; and a source 38 of light with a mode profile that provides an electric field which has a vector component substantially perpendicular to a surface of the elliptical shaped mirror, the structure 20 directing at least a portion of the light onto at least a portion of the elliptical shaped mirror 14. The Office asserts that the elliptical shaped mirror 14 focusing the portion of light onto another portion 22 of the structure 20 enhancing the electric field of the light which optically interacts with an adjacent object 26, see Fig. 1. The Office asserts the mirror 14 is regarded as having an elliptical shape since it is a spherical mirror and a sphere is a subclass of an ellipsoid.

Bernacki does not disclose or suggest, “the elliptical shaped mirror directing the at least a portion of the light on to at least another substantially opaque portion of the structure enhancing the electric field of the light which optically interacts with an adjacent object” as recited in claim 45 or “the elliptical shaped mirror directing the at least a portion of the light on to at least another substantially opaque portion of the structure enhancing the electric field of the light which optically interacts with an adjacent object” as recited in claim 49. The Office’s attention is respectfully directed to FIG. 1 and col. 3, lines 47-49 in Bernacki which illustrates and recites, “Light ray 40 then undergoes a third reflection 46 back to towards the uncoated part 22 of the plano-convex lens 20 which focuses the light right 40 onto the photo detector 26.” Accordingly, in Bernacki the mirror 12 reflects the light onto a non-opaque or transparent portion of the lens 22 which allows the light to be focused on the photo detector 26. Nowhere does Bernacki teach or suggest a structure as claimed that provides a highly localized, enhanced field which allows for a highly localized interaction with the surface 26 of an object 12. Accordingly, in view of the foregoing amendments and remarks, the Office is respectfully requested to reconsider and withdraw the rejection of claims 45 and 49. Since claims 46 and 48 depend from and contain the limitations of claim 45 and claims 50 and 52 depend from and contain the limitations of claim 49, they are distinguishable over the cited references and are patentable in the same manner as claims 45 and 49.

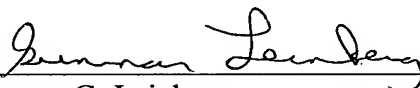
The Office objected to claims 9-13, 22-26, 31-35, 40-44, 47, and 51 as being dependent upon a rejected base claim, but would be allowable if rewritten in independent

form including all of the limitations of the base claim and any intervening claims, and if claim 47 is suitably amended to avoid being subject to the same objection as claim 45 above. Accordingly, Applicant has rewritten claims 9, 22, 31, and 40 in independent form including all of the limitations of the base claim and any intervening claims and the remaining claims 8-13, 23-26, 32-35, and 41-44 depend from one of these new independent claims. Additionally, Applicants have rewritten claims 47 and 51 in independent form to recite at least a pair of elliptical shaped mirrors which the Office has asserted is distinguishable over the prior art of record in combination with the other recited limitations. In view of the amendments and remarks, the Office is respectfully requested to reconsider and withdraw this objection.

In view of all of the foregoing, applicant submits that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

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Gunnar G. Leinberg  
Registration No. 35,584

NIXON PEABODY LLP  
Clinton Square, P.O. Box 31051  
Rochester, New York 14603-1051  
Telephone: (585) 263-1014  
Facsimile: (585) 263-1600